

REMARKS

Claims 1-34 are all the claims pending in the application.

Claim Rejections - 35 U.S.C. § 102

Claims 1-3, 6-10, 13-16, 20, 21, 29-31 and 33 are rejected under 35 U.S.C. § 102(e) as being unpatentable over Jinzaki et al. (U.S. Patent 7,133,407, hereinafter “Jinzaki”).

Applicant respectfully traverses the rejection.

Claim 1 recites, *inter alia*, “terminating, at the transport layer relay device, a first transport layer connection...and a second transport layer connection.” However, Jinzaki neither teaches nor suggests the claimed “terminating.” This is because Jinzaki does not disclose terminating a transport layer connection. Rather, Jinzaki discloses a relay device (210) on a transmitting side and a relay device (220) on a receiving side, each of the relay devices (210, 220) having an IEEE1394 adapter (411) for connecting the devices (210, 220) to end devices and an Ethernet adapter (413) for connecting the devices (210, 220) over the Internet. *See* Jinzaki, FIG. 11, col. 18, ll. 38-44. The relay devices (210, 220) operate to receive IEEE1394 data as an input, encapsulate the IEEE1394 data into an Ethernet packet, transmit the packet over the Internet, receive the Ethernet packet, decapsulate the Ethernet packet, and obtain the IEEE1394 data as an output. *See* Jinzaki, col. 18, l. 45 - col. 19, l. 31. There is no teaching or suggestion that the relay devices (210, 220) terminate a transport layer connection. Rather, the *relay* devices (210, 220) in Jinzaki simply generate a “relay packet” (*see* Jinzaki, col. 41, ll. 35-49) and *relay* IEEE1394 data between end devices “for consecutively transferring prescribe transfer units at a specific transfer rate and with a specific transfer delay.” *See* Jinzaki, col. 11, ll. 19-25.

Claim 1 also recites, *inter alia*, “terminating...a first transport layer connection...at a first transmission rate...and a second transport layer connection...at a second transmission rate.” However, Jinzaki also neither teaches nor suggests this claimed feature because Jinzaki does not disclose terminating plural transport layer connections at various transmission rates. Instead, Jinzaki merely discloses that a relay device (250) on a transmitting side transmits packets to a relay device (260) on a receiving side at a transmission rate that is based on packet reception at the receiving side relay device (260). *See* Jinzaki, col. 35, ll. 1-7. There is no teaching that a relay device in Jinzaki terminates plural transport layer connections at various transmission rates.

To the extent the Examiner’s position (*see* Office Action, p. 2) is based on the assertion that Figure 64 of Jinzaki allegedly teaches the claimed “terminating,” Applicant respectfully disagrees. Figure 64 of Jinzaki illustrates a relay device (1200) that receives two channels of video data at IEEE1394 adapter (1201). The video data is divided and converted into IP format and transmitted over the Internet via adapters (1204-1, 1204-2). *See* Jinzaki, col. 66, ll. 15-21. In a receiving relay device (1214), the divided data is united and relayed to display devices (1215-1, 1215-2) through IEEE1394 adapter (1213). *See* Jinzaki, col. 66, ll. 47-57. There is no teaching or suggestion that the relay devices (1200, 1214) terminate connections of any sort. Instead, the relay devices (1200, 1214) simply relay data between each other and forward the data to display devices via IEEE1394 adapters. Therefore, Jinzaki fails to teach or suggest the claimed “terminating.”

Further, claim 1 recites, *inter alia*, “relaying data flow of said first transport layer connection to said first destination terminal as a first relay connection and data flow of said

second transport layer connection to said second destination terminal as a second relay connection to respectively separate said first and second transport layer connections.” However, Jinzaki neither teaches nor suggests the claimed “relaying.” This is because Jinzaki does not disclose terminating transport layer connections, converting the terminated transport layer connections, and relaying the data of the terminated connections as new connections. Rather, as discussed above, Jinzaki simply relays information between various terminals using a same connection.

To the extent the Examiner’s position (*see* Office Action, p. 2) is based on the assertion that Figures 35 and 69 of Jinzaki allegedly teach the claimed “relaying,” Applicant respectfully disagrees. Figures 35 (*see* “Relay Device” (610)) and 69 (*see* “Sender” and “Receiver”) of Jinzaki clearly illustrate plural relay devices. There is no teaching or suggestion that any one of the devices illustrated in Jinzaki relay plural connections as new relay connections. Therefore, Jinzaki fails to teach or suggest the claimed “relaying.”

Still further, claim 1 recites, *inter alia*, “determining a total transmission rate of said first and second relay connections based on the first and second transmission rates.” However, Jinzaki neither teaches nor suggests the claimed “determining.” This is because Jinzaki does not disclose calculating a total transmission rate of second connections based on transmission rates of terminated first connections. At best, Jinzaki only discloses transmitting data between relay devices at a transmission rate based packet reception at the receiving side. *See* Jinzaki, col. 35, ll. 1-7. There is absolutely no teaching or suggestion that a “total transmission rate” for plural

connections is calculated. Further, there is no teaching or suggestion that the transmission rate in Jinzaki is calculated based on transmission rates for other connections.

To the extent the Examiner's position (*see* Office Action, p. 2) is based on the assertion that "Jinzaki et al. reference mentions calculating transmission rate in column 28 lines 38-43," Applicant respectfully submits that Jinzaki simply sets a transmission rate for a single outgoing to connection to a single device based on "mode information" (*see* Jinzaki, col. 28, l. 40), which includes symbols for indicating a transmission mode (*see* Jinzaki, col. 27, ll. 57-59). However, the mode information in Jinzaki does not include a transmission rate for other connections. Therefore, Jinzaki fails to teach or suggest the claimed "determining."

As a result, Jinzaki fails to teach or suggest all the features of claim 1, and hence claim 1 and its dependent claims would not have been anticipated by Jinzaki for at least these reasons.

Independent claims 8, 15, and 33 recite features similar to those discussed above regarding claim 1 and are rejected by the Examiner upon substantially the same rationale. Accordingly, claims 8, 15, 33, and their dependent claims also would not have been anticipated by Jinzaki for at least reasons analogous to those discussed above regarding claim 1.

Claim Rejections - 35 U.S.C. § 103

Claims 5, 12 and 19 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Jinzaki in view of Yao et al. (U.S. Patent 6,097,697, hereinafter "Yao").
Applicant respectfully traverses the rejection.

Claims 5, 12, and 19 depend on claims 1, 8, and 15, respectively, and incorporate all the features of claims 1, 8, and 15. Yao is merely cited for teaching application information. Even if

Jinzaki could have somehow been modified based on Yao, as the Examiner asserts in the Office Action, the combination would still not contain all the features in claims 1, 8, and 15, and hence claims 5, 12, and 19, as discussed above. Accordingly, claims 5, 12, and 19 would not have been rendered unpatentable by the combination of Jinzaki and Yao for at least these reasons.

Claims 4, 11 and 18 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Jinzaki in view of Rochberger et al. (U.S. Patent 6,760,309, hereinafter “Rochberger”). Applicant respectfully traverses the rejection.

Claims 4, 11, and 18 depend on claims 1, 8, and 15, respectively, and incorporate all the features of claims 1, 8, and 15. Rochberger is merely cited for teaching traffic priority. Even if Jinzaki could have somehow been modified based on Rochberger, as the Examiner asserts in the Office Action, the combination would still not contain all the features in claims 1, 8, and 15, and hence claims 4, 11, and 18, as discussed above. Accordingly, claims 4, 11, and 18 would not have been rendered unpatentable by the combination of Jinzaki and Rochberger for at least these reasons.

Claims 22-24, 27, 28, 32 and 34 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Jinzaki in view of Trebes, Jr. (U.S. Pub. 2002/0093980, hereinafter “Trebes”). Applicant respectfully traverses the rejection.

Claims 22 and 34

Claim 22 recites, *inter alia*, “a plurality of terminal-side connection termination units that terminate transport layer connections between a plurality of source terminals and a plurality of destination terminals in the transport layer.”

However, the combination of Jinzaki and Trebes neither teaches nor suggests the claimed “plurality of terminal-side connection termination units.” This is because neither Jinzaki nor Trebes discloses any structure that terminates transport layer connections between plural source and destination devices. As discussed above regarding claim 1, at best, Jinzaki simply discloses relaying data from between devices through relay devices. There is, however, no teaching or suggestion of any structure for terminating plural connections between plural source and destination devices.

To the extent the Examiner’s position (*see* Office Action, p. 9) is based on the assertion that elements 703A, 703B, 704A, and 704B in Figure 31 Jinzaki allegedly teach the “plurality of terminal-side connection termination units,” Applicant respectfully disagrees. Jinzaki discloses that elements 703A, 703B, 704A, and 704B are digital video cameras and digital video decks. *See* Jinzaki, FIG. 31, col. 43, ll. 43-53. A person having ordinary skill in the art would understand that video cameras or digital video decks are not operable to “terminate transport layer connections between a plurality of source terminals and a plurality of destination terminals in the transport layer,” as required by claim 22. Therefore, Jinzaki fails to teach or suggest the claimed “plurality of terminal-side connection termination units.”

Claim 22 also recites, *inter alia*, “an interdevice connection termination unit that terminates a plurality of transport layer connections with a plurality of transport layer relay devices that relay transport layer data between said plurality of terminal-side connection termination units and said interdevice connection termination unit.” Again, as discussed above regarding claim 1, at best, Jinzaki simply discloses relaying data from between devices through

relay devices. There is no teaching or suggestion of any structure for terminating plural connections between plural relay devices and plural the claimed “terminal-side connection termination units.”

Further, claim 22 recites, “a transmission rate control unit that determines a total transmission rate of the plurality of relay connections.” However, Jinzaki neither teaches nor suggests the “transmission rate control unit” since Jinzaki does not disclose calculating a “total transmission rate” for plural connections. To the extent the Examiner’s position (*see* Office Action, p. 9) is based on the assertion that Internet adapter (413) allegedly teaches the claimed “transmission rate control unit,” Applicant respectfully disagrees. The Internet adapter (413) is simply a conventional network adapter for transmitting data over a network. A person having ordinary skill in the art would clearly understand that the adapter (413) does not perform any sort of transmission rate control, and much less determining “a total transmission rate of the plurality of relay connections.”

Trebes is merely cited for teaching a multiplexer and also fails to teach or suggest the features discussed above. Accordingly, even if Jinzaki and Trebes could have somehow been combined, as the Examiner alleges, the combination would still fail to teach or suggest all the features in claim 22. Therefore, claim 22 and its dependent claims would not have been rendered unpatentable by the combination of Jinzaki and Trebes for at least these reasons.

Claim 34 recites features similar to those discussed above regarding claim 22, and hence claim 34 also would not have been rendered unpatentable by the combination of Jinzaki and Trebes for at least reasons analogous to those discussed above regarding claim 22.

Claim 25 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Jinzaki in view of Trebes, as applied to claim 22, and further in view of Rochberger.

Applicant respectfully traverses the rejection.

Claim 25 depends on claim 22 and incorporates all the features of claim 22. Rochberger is merely cited for teaching effective transmission rates. Even if Jinzaki and Trebes could have somehow been modified based on Rochberger, as the Examiner asserts, the combination would still not contain all the features in claim 22, and hence claim 25, as discussed above. Accordingly, claim 25 would not have been rendered unpatentable by the combination of Jinzaki, Trebes, and Rochberger for at least these reasons.

Claim 26 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Jinzaki, in view of Trebes, as applied to claim 22, and further in view of Yao. Applicant respectfully traverses the rejection.

Claim 26 depends on claim 22 and incorporates all the features of claim 22. Yao is merely cited for teaching application information. Even if Jinzaki and Trebes could have somehow been modified based on Yao, as the Examiner asserts, the combination would still not contain all the features in claim 22, and hence claim 26, as discussed above. Accordingly, claim 26 would not have been rendered unpatentable by the combination of Jinzaki, Trebes, and Yao for at least these reasons.

RESPONSE UNDER 37 C.F.R. § 1.116
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Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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